

WHAT IS CLAIMED IS:

1. An electrophoretic display, comprising:
a substrate, and
at least one pixel disposed thereon
5 comprising electrophoretic particles and a dispersion
medium or comprising the electrophoretic particles,
the dispersion medium and a color filter layer,
wherein at least one of the electrophoretic
particles, the dispersion medium and the color filter
10 layer constituting each pixel has a property of being
colored a predetermined color by an external stimulus
and said one of the electrophoretic particles, the
dispersion medium and the color filter layer is
changeable into a colored member by the external
15 stimulus.
2. A display according to Claim 1, wherein the
colored member is at least one of the electrophoretic
20 particles, the dispersion medium, and the color filter
layer.
3. A display according to Claim 1, wherein the
colored member contains a dye which is colored by at
25 least the external stimulus.
4. A display according to Claim 3, wherein the

dye is encapsulated in a microcapsule.

5. A display according to Claim 3, wherein the dye has a property of assuming a plurality of
5 different colors by at least one species of external stimulus.

6. A process for producing an electrophoretic display of the type wherein at least one pixel
10 comprising electrophoretic particles and a dispersion medium or comprising the electrophoretic particles, the dispersion medium, a color filter layer is disposed on a substrate, said process comprising:
a step of providing a member, to be colored
15 in a predetermined color by an external stimulus, as at least a part of members constituting said at least one pixel, and
a step of coloring the member to be colored by applying the external stimulus to the member.

20

7. A process according to Claim 6, wherein the member to be colored is at least one of the electrophoretic particles, the dispersion medium, and the color filter layer.

25

8. A process according to Claim 6, wherein said process further comprises a step of spatially sealing

hermetically the electrophoretic particles and the dispersion medium.

9. A process according to Claim 8, wherein the
5 coloring step is performed after the hermetically sealing step.

10. A process according to Claim 6, wherein the external stimulus is selected from the group
10 consisting of thermal energy, light energy, electron ray, γ ray, and X ray.

11. A process according to Claim 6, wherein said at least one pixel is a plurality of pixels.
15

12. A process according to Claim 11, wherein a part of the plurality of pixels are shielded, and a remaining part of the plurality of pixels are supplied with the external stimulus.
20

13. A process according to Claim 6, wherein the external stimulus is applied in a state that the electrophoretic particles and the dispersion medium are encapsulated in a microcapsule.
25